Application No. 10/573,364 Amendment dated July 13, 2011 After Allowance Under 37 C.F.R. 1.312 Docket No.: 026038,0281PTUS

## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior listings of claims.

- 1.-20. (Cancelled)
- (Previously presented) A product containing (a) a compound as defined in claim
   and (b) another antiretroviral compound, as a combined preparation for simultaneous,
   separate or sequential use in the treatment of HIV infection.
- 22. (Previously presented) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and as active ingredients (a) a compound as defined in claim 25 and (b) another antiretroviral compound.
- 23. (Previously presented) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and as active ingredient a therapeutically effective amount of a compound as claimed in claim 25.
- 24. (Previously Presented) A process for preparing a pharmaceutical composition comprising mixing a therapeutically effective amount of a compound as claimed in claim 25 with a pharmaceutically acceptable carrier.
  - 25. (Previously Presented) A compound selected from the group consisting of:

Application No. 10/573,364 Amendment dated July 13, 2011 After Allowance Under 37 C.F.R. 1.312

or a pharmaceutically acceptable addition salt thereof.

## 26. (Previously Presented ) A compound of formula

or a pharmaceutically acceptable addition salt, or a stereochemically isomeric form thereof, wherein

A and B each represents a radical of formula

$$R^2$$
 (a) or  $R^2$   $R^3$  (b) wherein

ring E represents phenyl, pyridyl, pyridazinyl, pyrimidinyl or pyrazinyl;

ring F represents phenyl, pyridyl, pyridazinyl, pyrimidinyl or pyrazinyl;

 $R^1$  represents hydrogen; aryl; formyl;  $C_{1.6}$ alkylcarbonyl;  $C_{1.6}$ alkyloxycarbonyl;  $C_{1.6}$ alkyl optionally substituted with formyl,  $C_{1.6}$ alkylcarbonyl,

 $C_{1.6}$ alkyloxycarbonyl,  $C_{1.6}$ alkylcarbonyloxy; or  $C_{1.6}$ alkyloxy $C_{1.6}$ alkylcarbonyl substituted with  $C_{1.6}$ alkyloxycarbonyl;

R<sup>2</sup> represents cyano; C<sub>1-6</sub>alkyl substituted with cyano, aminocarbonyl or mono- or di(C<sub>1-4</sub>alkyl)aminocarbonyl; C<sub>2-6</sub>alkenyl substituted with cyano, aminocarbonyl or mono- or di(C<sub>1-4</sub>alkyl)aminocarbonyl; or C<sub>2-6</sub>alkynyl substituted with cyano, aminocarbonyl or mono- or di(C<sub>1-4</sub>alkyl)aminocarbonyl;

 $X_{1} \ represents -NR^{5} -; -NH-NH-; -N=N-; -O-; -C(=O)-; -C_{14} \\ alkanediyl-; -CHOH-; -S-; -S(=O)_{p^{-}}; -X_{2}-C_{14} \\ alkanediyl-; -C_{14} \\ alkanediyl-X_{2}-; or$ 

-C<sub>1-4</sub>alkanediyl-X<sub>2</sub>-C<sub>1-4</sub>alkanediyl-;

 $X_2$  represents –NR<sup>5</sup>.; -NH-NH-; -N=N-; -O-; -C(=O)-; -CHOH-; -S-; or -S(=O)<sub>p</sub>-; m represents an integer of value 1, 2, 3 or 4;

 $R^3$  represents cyano; aminocarbonyl; amino; halo; NHR<sup>13</sup>; NR<sup>13</sup>R<sup>14</sup>; -C(=O)-NHR<sup>13</sup>; -C(=O)-NR<sup>13</sup>R<sup>14</sup>; -C(=O)-R<sup>15</sup>; -CH=N-NH-C(=O)-R<sup>16</sup>; C<sub>1,e</sub>alkyl optionally substituted with one

or more substituents each independently selected from  $R^{3a}$ ;

 $C_{1-6}alkyloxy\ optionally\ substituted\ with\ one\ or\ more\ substituents\ each\ independently\ selected\ from\ R^{3a};\ C_{1-6}alkyloxyC_{1-6}alkyl\ optionally\ substituted\ with\ one\ or\ more\ substituents\ each\ independently\ selected\ from\ R^{3a};\ C_{2-6}alkenyl\ optionally\ substituted\ with\ one\ or\ more\ substituents\ each\ independently\ selected\ from\ R^{3a};\ C_{2-6}alkynyl\ optionally\ substituted\ with\ one\ or\ more\ substituents\ each\ independently\ selected\ from\ R^{3a};\ C_{2-6}alkynyl\ optionally\ substituted\ with\ one\ or\ more\ substituents\ each\ independently\ selected\ from\ R^{3a};\ -C(=N-O-R^8)-C_{1-4}alkyl;\ R^7\ or\ -X_3-R^7;$ 

 $R^{3a} \ represents \ halo, \ cyano, \ hydroxy, \ NR^9R^{10}, \ -C(=O)-NR^9R^{10}, \ -C(=O)-C_{1-6}alkyl, \ -C(=$ 

$$\begin{split} X_3 \text{ represents -NR}^5, -NH-NH-; -N=N-; -O-; -C(=O)-; -S-; -S(=O)_p-; \\ -X_{4a}-C_{1-4}alkanediyl-; -C_{1-4}alkanediyl-X_{4b}-; -C_{1-4}alkanediyl-X_{4a}-C_{1-4}alkanediyl-; or -C(=N-OR^8)-C_{1-4}alkanediyl-; \end{split}$$

 $X_{4a}$  represents –NR5-; -NH-NH-; -N=N-; -C(=O)-; -S-; or -S(=O)\_p-;

 $\rm X_{4b}$  represents -NH-NH-; -N=N-; -O-; -C(=O)-; -S-; or -S(=O)\_p-;

each  $R^4$  independently represents hydroxy; halo;  $C_{1.6}$ alkyl optionally substituted with one or more substituents each independently selected from  $R^{1a}$ ;  $C_{2.6}$ alkenyl optionally substituted with one or more substituents each independently selected from  $R^{4a}$ ;

 $C_{2.6}$ alkynyl optionally substituted with one or more substituents each independently selected from  $R^{4a}$ ;  $C_{3.7}$ cycloalkyl;  $C_{1.6}$ alkyloxy;  $C_{1.6}$ alkyloxycarbonyl;  $C_{1.6}$ alkylcarbonyloxy; carboxyl; formyl; cyano; nitro; amino; mono- or

$$\begin{split} & di(C_{1:6}alkyl)amino; polyhaloC_{1:6}alkyl; polyhaloC_{1:6}alkyloxy; polyhaloC_{1:6}alkylthio; \\ & -S(=O)_pR^6; -NH-S(=O)_pR^6; -C(=O)R^6; -NHC(=O)H; -C(=O)NHNH_2; NHC(=O)R^6; C(=NH)R^6; \\ & \text{or } R^7; \end{split}$$

R<sup>4a</sup> represents halo, cyano, NR<sup>9</sup>R<sup>10</sup>, hydroxy or -C(=O)R<sup>6</sup>;

 $R^{5}\ represents\ hydrogen;\ aryl;\ formyl;\ C_{1-6}alkylcarbonyl;\ C_{1-6}alkylcarbonyl;\ C_{1-6}alkylcarbonyl;\ C_{1-6}alkylcarbonyl,$ 

 $C_{1-6} alkyloxy carbonyl \ or \ C_{1-6} alkyloxy C_{1-$ 

 $R^6 \text{ represents } C_{1.6} \text{alkyl, amino, mono- or } \text{di}(C_{1.4} \text{alkyl)} \text{amino or polyhalo} C_{1.4} \text{alkyl};$ 

 $R^7$  represents a monocyclic, bicyclic or tricyclic saturated carbocycle; a monocyclic, bicyclic or tricyclic partially saturated carbocycle; a monocyclic, bicyclic or tricyclic aromatic carbocycle; a monocyclic, bicyclic or tricyclic aromatic carbocycle; a monocyclic, bicyclic or tricyclic partially saturated heterocycle; or a monocyclic, bicyclic or tricyclic aromatic heterocycle; wherein each of said carbocyclic or heterocyclic ring systems may, whenever possible, optionally be substituted with one, two, three, four or five substituents each independently selected from halo, hydroxy, mercapto,  $C_{1-6}$ alkyl, hydroxy $C_{1-6}$ alkyl, amino $C_{1-6}$ alkyl, mono or di( $C_{1-6}$ alkyl)amino $C_{1-6}$ alkyl, formyl,  $C_{1-6}$ alkylcarbonyl,  $C_{3-7}$ cycloalkyl,  $C_{1-6}$ alkyloxy,  $C_{1-6}$ alkyloxycarbonyl,  $C_{1-6}$ alkylthio, cyano, nitro, polyhalo $C_{1-6}$ alkyl, polyhalo $C_{1-6}$ alkyloxy, aminocarbonyl,  $-CH(=N-O-R^8)$ ,  $R^{7a}$ ,  $-X_3-R^{7a}$  or  $R^{7a}-C_{1-6}$ alkanediyl-;

R<sup>7a</sup> represents a monocyclic, bicyclic or tricyclic saturated carbocycle; a monocyclic, bicyclic or tricyclic partially saturated carbocycle; a monocyclic, bicyclic or tricyclic aromatic carbocycle; a monocyclic, bicyclic or tricyclic saturated heterocycle; a monocyclic, bicyclic or tricyclic partially saturated heterocycle; or a monocyclic, bicyclic or tricyclic aromatic heterocycle; wherein each of said carbocyclic or heterocyclic ring systems may optionally be substituted with one, two, three, four or five substituents each independently selected from halo, hydroxy, mercapto,

$$\begin{split} &C_{1.6}\text{alkyl}, \text{ hydroxy} C_{1.6}\text{alkyl}, \text{ amino} C_{1.6}\text{alkyl}, \text{ mono or} \\ &\text{di}(C_{1.6}\text{alkyl})\text{amino} C_{1.6}\text{alkyl}, \text{ formyl}, C_{1.6}\text{alkylcarbonyl}, C_{3.7}\text{cycloalkyl}, C_{1.6}\text{alkyloxy}, \\ &C_{1.6}\text{alkyloxycarbonyl}, C_{1.6}\text{alkylthio}, \text{ cyano, nitro}, \\ &\text{polyhalo} C_{1.6}\text{alkyl}, \text{ polyhalo} C_{1.6}\text{alkyloxy}, \text{ aminocarbonyl}, -\text{CH}(=\text{N-O-R}^8); \end{split}$$

 $\ensuremath{\mbox{R}}^{8}$  represents hydrogen,  $\ensuremath{\mbox{C}}_{1\text{--}4}$  alkyl optionally substituted with aryl, or aryl;

 $R^{0}$  and  $R^{10}$  each independently represent hydrogen; hydroxy;  $C_{1-6}$ alkyl;  $C_{1-6}$ alkyloxy;  $C_{1-6}$ alkyloxycarbonyl; amino; mono- or di( $C_{1-6}$ alkyl)amino; mono- or di( $C_{1-6}$ alkyl)aminocarbonyl; -CH(=NR<sup>11</sup>) or  $R^{7}$ , wherein each of the aforementioned  $C_{1-6}$ alkyl groups may optionally and each individually be substituted with one or two substituents each independently selected from hydroxy,

 $C_{1\text{--}6} alkyloxy, \, hydroxy C_{1\text{--}6} alkyloxy, \, carboxyl, \, C_{1\text{--}6} alkyloxy carbonyl, \, cyano, \, amino, \, imino, \, mono-policy cyano, \, amino, \, imino, \, mono-policy cyano, \, amino, \, imino, \, im$ 

or  $di(C_{1-4}alkyl)$ amino, polyhalo $C_{1-4}alkyl$ , polyhalo $C_{1-4}alkyl$ oxy, polyhalo $C_{1-4}alkyl$ thio,  $-S(=O)_pR^6, -NH-S(=O)_pR^6, -C(=O)R^6, -NHC(=O)H, -C(=O)NHNH_2, -NHC(=O)R^6, -C(=NH)R^6, or R^7; or$ 

R9 and R10 may be taken together to form a bivalent radical of formula

 $R^{11}$  represents cyano;  $C_{1-4}$ alkyl optionally substituted with  $C_{1-4}$ alkyloxy, cyano, amino, mono- or di( $C_{1-4}$ alkyl)amino or aminocarbonyl;  $C_{1-4}$ alkylcarbonyl;

C1.4alkyloxycarbonyl; aminocarbonyl; mono- or di(C1.4alkyl)aminocarbonyl;

R12 represents hydrogen or C1-4alkyl;

 $R^{13}$  and  $R^{14}$  each independently represent  $C_{1-6}$ alkyl optionally substituted with cyano, aminocarbonyl or mono- or di( $C_{1-4}$ alkyl)aminocarbonyl;  $C_{2-6}$ alkenyl optionally substituted with cyano, aminocarbonyl or mono- or di( $C_{1-4}$ alkyl)aminocarbonyl;

 $C_{2,6}$ alkynyl optionally substituted with cyano, aminocarbonyl or mono- or  $di(C_{1,4}$ alkyl)aminocarbonyl;

 $R^{15}$  represents  $C_{1:6}$ alkyl optionally substituted with cyano, aminocarbonyl or mono- or di( $C_{1:4}$ alkyl)aminocarbonyl;

 $R^{16}$  represents  $C_{14}$ alkyl optionally substituted with cyano, aminocarbonyl or mono- or  $di(C_{14}$ alkyl)aminocarbonyl; or  $R^7$ ;

-C-D- represents a bivalent radical of formula

-N=CH-NR 17-

(c-1); or

 $-NR^{17}$ -CH=N- (c-2);

R<sup>17</sup> represents hydrogen; C<sub>1-c</sub>alkyl optionally substituted with hydroxy, cyano, aminocarbonyl, mono-or di(C<sub>1-4</sub>alkyl)aminocarbonyl, C<sub>1-4</sub>alkyloxycarbonyl or aryl; prepresents an integer of value 1 or 2;

aryl represents phenyl or phenyl substituted with one, two, three, four or five substituents each independently selected from halo, hydroxy, mercapto,  $C_{1.6}$ alkyl, hydroxy $C_{1.6}$ alkyl, amino $C_{1.6}$ alkyl, mono or di $(C_{1.6}$ alkyl)amino $C_{1.6}$ alkyl,

 $C_{1\text{-}6} alkylcarbonyl,\, C_{3\text{-}7} cycloalkyl,\, C_{1\text{-}6} alkyloxy,\, C_{1\text{-}6} alkyloxycarbonyl,$ 

 $C_{1\text{-}6} alkylthio, cyano, nitro, polyhalo C_{1\text{-}6} alkyl, polyhalo C_{1\text{-}6} alkyloxy, aminocarbonyl, R^7 \ or \ -X_3-R^7;$ 

provided that when A represents a radical of formula (a) then B represents a radical of formula (b) and when A represents a radical of formula (b) then B represents a radical of formula (a).

 (Previously presented) A compound according to claim 26 wherein the compound has the formula

$$R^3$$
 $R^3$ 
 $R^3$ 
 $R^3$ 
 $R^3$ 
 $R^3$ 
 $R^2$ 

or a pharmaceutically acceptable addition salt, or a stereochemically isomeric form thereof.

wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, ring E, ring F, C, D, X<sub>1</sub> and m are as defined in claim 26.

28. (Currently Amended) A compound according to claim 27 wherein the compound of formula (I-A) has the formula

$$R^4$$
 $R^4$ 
 $R^4$ 
 $R^4$ 
 $R^4$ 
 $R^4$ 
 $R^4$ 
 $R^2$ 

or a pharmaceutically acceptable addition salt, or a stereochemically isomeric form thereof.

wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, ring E, ring F, C, D and X<sub>1</sub> are as defined in claim <u>27</u> [[26]].

29. (Previously presented) A compound according to claim 26 wherein the compound has the formula

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

or a pharmaceutically acceptable addition salt or a stereochemically isomeric form thereof.

wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, ring E, ring F, C, D, X<sub>1</sub> and m are as defined in claim 26.

30. (Currently Amended) A compound according to claim 29 wherein the compound of formula (I-B) has the formula

$$\begin{array}{c|c}
R^{1} & E \\
R^{2} & R^{2}
\end{array}$$

$$\begin{array}{c|c}
R^{4} & (I-B-2) \\
R^{3} & R^{3}
\end{array}$$

or a pharmaceutically acceptable addition salt, or a stereochemically isomeric form thereof.

wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, ring E, ring F, C, D and X<sub>1</sub> are as defined in claim 29 [[26]].

 (Previously Presented) A compound according to claim 26 wherein ring E is phenyl.

- 32 (Previously Presented) A compound according to claim 26 wherein ring F is phenyl.
- (Previously presented) A compound according to claim 26 wherein the compound has the formula

$$(R^4)_{m} = \begin{bmatrix} R^3 \\ -1 \\ b^4 \\ b^4 \end{bmatrix} = b^5 \\ \begin{pmatrix} 1 \\ 1 \\ 1 \\ 4 \end{pmatrix} = a^2 + a^3 \\ \begin{pmatrix} 1 \\ 1 \\ 1 \\ 4 \end{pmatrix} = a^2 + a^3$$
 (I')

or a pharmaceutically acceptable addition salt, or a stereochemically isomeric form thereof, wherein

-a<sup>1</sup>=a<sup>2</sup>-C(R<sup>2</sup>)=a<sup>3</sup>-a<sup>4</sup>= represents a bivalent radical of formula

-CH=CH-C( $R^2$ )=CH-CH= (a-1);

-N=CH-C(R2)=CH-CH= (a-2);

-CH=N-C(R<sup>2</sup>)=CH-CH= (a-3);

 $-N=CH-C(R^2)=N-CH=$  (a-4);

-N=CH-C(R<sup>2</sup>)=CH-N= (a-5);

-CH=N-C( $R^2$ )=N-CH= (a-6); or

 $-N=N-C(R^2)=CH-CH=$  (a-7);

-b1=b2-b3=b4- represents a bivalent radical of formula

-CH=CH-CH=CH- (b-1);

-N=CH-CH=CH- (b-2);

-N=CH-N=CH- (b-3);

-N=CH-CH=N- (b-4); or

-N=N-CH=CH- (b-5);

-C-D- represents a bivalent radical of formula

Application No. 10/573,364 Amendment dated July 13, 2011 After Allowance Under 37 C.F.R. 1.312

m represents an integer of value 1, 2, 3 and in case  $-b^1=b^2-b^3=b^4-$  is (b-1), then m may also be 4:

 $R^1$  represents hydrogen; aryl; formyl;  $C_{1\cdot6}$ alkylcarbonyl;  $C_{1\cdot6}$ alkyloxycarbonyl;  $C_{1\cdot6}$ alkyloxycarbonyl;  $C_{1\cdot6}$ alkylcarbonyl,

 $C_{1-6}$ alkyloxycarbonyl,  $C_{1-6}$ alkylcarbonyloxy; or  $C_{1-6}$ alkyloxy $C_{1-6}$ alkylcarbonyl substituted with  $C_{1-6}$ alkyloxycarbonyl;

 $R^2$  represents cyano;  $C_{14}$ alkyl substituted with cyano, aminocarbonyl or mono- or  $di(C_{14}$ alkyl)aminocarbonyl;  $C_{24}$ alkenyl substituted with cyano, aminocarbonyl or mono- or  $di(C_{14}$ alkyl)aminocarbonyl; or  $C_{24}$ alkynyl substituted with cyano, aminocarbonyl or mono- or  $di(C_{14}$ alkyl)aminocarbonyl;

 $X_1$  represents  $-NR^5$ , -NH-NH-, -N=N-, -O-, -C(=O)-,  $C_{1-4}$ alkanediyl, -CHOH-, -S-, -S(=O)<sub>n</sub>-, - $X_2$ - $C_{1-4}$ alkanediyl- or - $C_{1-4}$ alkanediyl- $X_2$ -;

X2 represents -NR5-, -NH-NH-, -N=N-, -O-, -C(=O)-, -CHOH-, -S-, -S(=O)0-;

 $R^3$  represents NHR $^{13}$ ; NR $^{13}R^{14}$ ; -C(=O)-NHR $^{13}$ ; -C(=O)-NR $^{13}R^{14}$ ; -C(=O)-R $^{15}$ ; -CH=N-NH-C(=O)-R $^{16}$ ; cyano; halo; C $_{16}$ alkyl; polyhaloC $_{1.6}$ alkyl; C $_{16}$ alkyl substituted with one or more substituents each independently selected from cyano, NR $^9R^{10}$ , -C(=O)-NR $^9R^{10}$ , -C(=O)-C $_{16}$ alkyl or R $^7$ ; C $_{1.6}$ alkyl substituted with hydroxy and a second substituent selected from cyano, NR $^9R^{10}$ , -C(=O)-NR $^9R^{10}$ , -C(=O)-C $_{1.6}$ alkyl or R $^7$ ; C $_{1.6}$ alkyloxyC $_{1.6}$ alkyl optionally substituted with one or more substituents each independently selected from cyano, NR $^9R^{10}$ , -C(=O)-NR $^9R^{10}$ , -C(=O)-C $_{1.6}$ alkyl or R $^7$ ; C $_{1.6}$ alkyloxy optionally substituted with one or more substituents each independently selected from cyano, NR $^9R^{10}$ , -C(=O)-NR $^9R^{10}$ , -C(=O)-C $_{1.6}$ alkyl or R $^7$ ; C $_{2.6}$ alkenyl optionally substituted with one or more substituents each independently selected from halo, cyano, NR $^9R^{10}$ , -C(=O)-NR $^9R^{10}$ , -C(=O)-C $_{1.6}$ alkyl or R $^7$ ; C $_{2.6}$ alkynl optionally substituents each independently selected from halo, cyano, NR $^9R^{10}$ , -C(=O)-NR $^9R^{10}$ 

 $X_3 \text{ is -NR}^5, \text{-NH-NH-, -N=N-, -O-, -C(=O)-, -S-, -S(=O)}_{\mathfrak{p}^*}, \text{-}X_{4\mathfrak{p}^*}C_{14}\text{alkanediyl-}\\ \text{-}C_{14}\text{alkanediyl-}X_{4\mathfrak{p}^*}, \text{-}C_{14}\text{alkanediyl-}X_{4\mathfrak{p}^*}C_{14}\text{alkanediyl-}, \text{-}C(=N-OR^8)\text{-}C_{14}\text{alkanediyl-};$ 

 $-C(=O)-C_{1-6}$ alkyl or  $R^7$ ;  $-C(=N-O-R^8)-C_{1-4}$ alkyl;  $R^7$  or  $-X_3-R^7$ ;

 $\label{eq:with $X_{4a}$ being -NH-NH-, -N=N-, -O-, -C(=O)-, -S-, -S(=O)_p$; and with $X_{4b}$ being -NH-NH-, -N=N-, -C(=O)-, -S-, -S(=O)_p$; each $R^4$ independently represents halo, hydroxy, $C_{1.6}$ alkyl, $C_{3.7}$ cycloalkyl, $C_{1.6}$ alkyloxy, hydroxy$C_{1.6}$ alkyl, amino$C_{1.6}$ alkyl, cyano, nitro, polyhalo$C_{1.6}$ alkyl, polyhalo$C_{1.6}$ alkyloxy, aminocarbonyl, mono- or $di(C_{1.4}$ alkyl)$ aminocarbonyl, $C_{1.6}$ alkyloxycarbonyl, $C_{1.6}$ alkyloxycarbon$ 

 $R^5$  is hydrogen; aryl; formyl;  $C_{1-6}$ alkylcarbonyl;  $C_{1-6}$ alkyloxycarbonyl;  $C_{1-6}$ alkyl optionally substituted with formyl,  $C_{1-6}$ alkylcarbonyl,  $C_{1-6}$ alkylcarbonyl or  $C_{1-6}$ alkylcarbonyloxy; or  $C_{1-6}$ alkyloxy $C_{1-6}$ alkylcarbonyl substituted with  $C_{1-6}$ alkyloxycarbonyl;  $R^6$  is  $C_{1-6}$ alkyl, amino, mono- or di( $C_{1-6}$ alkyl)amino or polyhalo $C_{1-6}$ alkyl;

 $R^7$  is a monocyclic, bicyclic or tricyclic saturated, partially saturated or aromatic carbocycle or a monocyclic, bicyclic or tricyclic saturated, partially saturated or aromatic heterocycle, wherein each of said carbocyclic or heterocyclic ring systems may optionally be substituted where possible with one, two, three, four or five substituents each independently selected from halo, hydroxy, mercapto,  $C_{1-6}$ alkyl, hydroxy $C_{1-6}$ alkyl, amino $C_{1-6}$ alkyl, mono or di( $C_{1-6}$ alkyl)amino $C_{1-6}$ alkyl, formyl,  $C_{1-6}$ alkylcarbonyl,  $C_{3-7}$ cycloalkyl,  $C_{1-6}$ alkyloxy,  $C_{1-6}$ alkyloxycarbonyl,

$$\begin{split} &C_{1.6}\text{alkylthio, cyano, nitro, polyhaloC}_{1.6}\text{alkyl, polyhaloC}_{1.6}\text{alkyloxy, aminocarbonyl,} \\ &-\text{CH}(=\text{N-O-R}^8), \, \text{R}^{7a}, \, -\text{X}_3\text{-R}^{7a} \text{ or } \text{R}^{7a}\text{-C}_{1.4}\text{alkanediyl-;} \end{split}$$

 $R^{7a}$  is a monocyclic, bicyclic or tricyclic saturated, partially saturated or aromatic carbocycle or a monocyclic, bicyclic or tricyclic saturated, partially saturated or aromatic heterocycle, wherein each of said carbocyclic or heterocyclic ring systems may optionally be substituted where possible with one, two, three, four or five substituents each independently selected from halo, hydroxy, mercapto,  $C_{1.6}$ alkyl, hydroxy $C_{1.6}$ alkyl, amino $C_{1.6}$ alkyl, mono or  $di(C_{1.6}$ alkyl)amino $C_{1.6}$ alkyl, formyl,  $C_{1.6}$ alkylcarbonyl,  $C_{3.7}$ cycloalkyl,  $C_{1.6}$ alkyloxy,  $C_{1.6}$ alkyloxycarbonyl,

 $C_{1-6}$ alkylthio, cyano, nitro, polyhalo $C_{1-6}$ alkyl, polyhalo $C_{1-6}$ alkyloxy, aminocarbonyl, or  $-CH(=N-O-R^8)$ :

R8 is hydrogen, C1.4alkyl optionally substituted with aryl, or aryl;

 $R^0$  and  $R^{10}$  each independently are hydrogen;  $C_{1-6}$ alkyl;  $C_{1-6}$ alkylcarbonyl;  $C_{1-6}$ alkyloxycarbonyl; amino; mono- or di( $C_{1-6}$ alkyl)amino; mono- or

 $di(C_{14}alkyl)$ aminocarbonyl; -CH(=NR<sup>11</sup>) or R<sup>7</sup>, wherein each of the aforementioned  $C_{14}alkyl$  groups may optionally and each individually be substituted with one or two substituents each

independently selected from hydroxy,  $C_{1-6}$ alkyloxy, hydroxy $C_{1-6}$ alkyloxy, carboxyl,  $C_{1-6}$ alkyloxycarbonyl, cyano, amino, imino, mono- or di( $C_{1-4}$ alkyl)amino, polyhalo $C_{1-4}$ alkyl,

 $C_{1-6}$ alkyloxycarbonyl, cyano, amino, imino, mono- or di( $C_{1-4}$ alkyl)amino, polyhalo $C_{1-4}$ alkyl polyhalo $C_{1-4}$ alkyloxy,

$$\label{eq:control_polyhaloC_14} \begin{split} &\text{polyhaloC}_{14} \text{alkylthio, -S(=O)}_p R^6, -\text{NH-S(=O)}_p R^6, -\text{C(=O)} R^6, -\text{NHC(=O)} H, -\text{C(=O)} \text{NHNH}_2, \\ &-\text{NHC(=O)} R^6, -\text{C(=NH)} R^6, R^7; \text{ or } \end{split}$$

R9 and R10 may be taken together to form a bivalent radical of formula

$$-CH_2-CH_2-CH_2-CH_2-$$
 (d-1);

$$\hbox{-CH$_2$-CH$_2$-CH$_2$-CH$_2$-} \ (d\hbox{-}2);$$

$$\hbox{-CH$_2$-CH$_2$-O-CH$_2$-CH$_2$-} \qquad \hbox{(d-3)};$$

$$-CH_2-CH_2-S-CH_2-CH_2-$$
 (d-4);

-CH<sub>2</sub>-CH<sub>2</sub>-NR
$$^{12}$$
-CH<sub>2</sub>-CH<sub>2</sub>-(d-5); or

-CH<sub>2</sub>-CH=CH-CH<sub>2</sub>- 
$$(d-6)$$
;

 $R^{11} \ represents \ cyano; \ C_{14} alkyl \ optionally \ substituted \ with \ C_{14} alkyloxy, \ cyano, \ amino, \\ mono- \ or \ di(C_{14} alkyl) amino \ or \ amino \ carbonyl; \ C_{14} alkyl \ carbonyl;$ 

 $C_{1\text{--}4} alkyloxy carbonyl; aminocarbonyl; mono- \ or \ di (C_{1\text{--}4} alkyl) aminocarbonyl;$ 

 $R^{12}$  represents hydrogen or  $C_{1-4}$ alkyl;

 $R^{13}$  and  $R^{14}$  each independently represent  $C_{1\text{-}6}$ alkyl optionally substituted with cyano, aminocarbonyl or mono- or di( $C_{1\text{-}4}$ alkyl)aminocarbonyl;  $C_{2\text{-}6}$ alkenyl optionally substituted with cyano, aminocarbonyl or mono- or di( $C_{1\text{-}4}$ alkyl)aminocarbonyl;

 $C_{2-6}$ alkynyl optionally substituted with cyano, aminocarbonyl or mono- or di( $C_{1-4}$ alkyl)aminocarbonyl;

R<sup>15</sup> represents C<sub>1-6</sub>alkyl substituted with cyano, aminocarbonyl or mono- or di(C<sub>1-a</sub>alkyl)aminocarbonyl;

Application No. 10/573,364 Amendment dated July 13, 2011 After Allowance Under 37 C.F.R. 1.312

 $R^{16} \ represents \ C_{1-6} alkyl \ optionally \ substituted \ with \ cyano, \ aminocarbonyl \ or \ mono-or \ di(C_{1-4} alkyl) aminocarbonyl; \ or \ R^7;$ 

 $\rm R^{17}$  represents hydrogen;  $\rm C_{1-6}$  alkyl; or  $\rm C_{1-6}$  alkyl substituted with aryl;

p is 1 or 2;

aryl represents phenyl or phenyl substituted with one, two, three, four or five substituents each independently selected from halo, hydroxy, mercapto,  $C_{1.6}$ alkyl, hydroxy $C_{1.6}$ alkyl, amino $C_{1.8}$ alkyl, mono or di $(C_{1.8}$ alkyl)amino $C_{1.8}$ alkyl,

 $C_{1.6}$ alkylcarbonyl,  $C_{3-7}$ cycloalkyl,  $C_{1.6}$ alkyloxy,  $C_{1-6}$ alkyloxycarbonyl,

 $C_{1-6}$ alkylthio, cyano, nitro, polyhalo $C_{1-6}$ alkyl, polyhalo $C_{1-6}$ alkyloxy, aminocarbonyl,  $R^7$  or  $-X_3-R^7$ .

- $\mbox{34.} \qquad \mbox{(Previously presented) A compound according to claim 26 wherein $R^2$ represents cyano.}$
- 35. (Previously presented) A compound according to claim 26 wherein R<sup>3</sup> is cyano; aminocarbonyl; C<sub>1-6</sub>alkyl optionally substituted with cyano or aminocarbonyl; C<sub>1-6</sub>alkyloxy optionally substituted with cyano or aminocarbonyl; C<sub>2-6</sub>alkenyl substituted with cyano or aminocarbonyl.
- (Previously Presented) A compound according to claim 26 wherein m is 2; R<sup>1</sup> represents hydrogen; R<sup>2</sup> represents cyano;

 $C_{1-6}$ alkyl;  $C_{1-6}$ alkyl substituted with cyano;  $C_{1-6}$ alkyloxy optionally substituted with cyano;  $C_{2-6}$ alkenyl substituted with cyano or  $-C(=O)-NR^9R^{10}$ ; each  $R^4$  independently represents halo,  $C_{1-6}$ alkyl or  $C_{1-6}$ alkyloxy;  $X_1$  represents  $-NR^5$ - or -O-;  $R^5$  represents hydrogen;  $R^0$  and  $R^{10}$  each independently are hydrogen or  $C_{1-6}$ alkyl; or  $R^0$  and  $R^{10}$  may be taken together to form a bivalent radical of formula  $-CH_2-CH_2-CH_2-(d-3)$ ;  $R^{17}$  is hydrogen;  $C_{1-6}$ alkyl optionally substituted with hydroxy, cyano, aminocarbonyl,  $C_{1-6}$ alkyloxycarbonyl or aryl; aryl is phenyl substituted with  $C_{1-6}$ alkyloxy.

Application No. 10/573,364 Amendment dated July 13, 2011 After Allowance Under 37 C.F.R. 1.312

- (Previously presented) A pharmaceutical composition comprising a
  pharmaceutically acceptable carrier and a therapeutically effective amount of a compound of
  claim 26.
- (Previously Presented) A process for preparing a pharmaceutical composition comprising mixing a therapeutically effective amount of a compound of claim 26 with a pharmaceutically acceptable carrier.
  - 39. (Cancelled)
- 40. (Previously presented) A product containing (a) a compound as defined in claim 26, and (b) another antiretroviral compound, as a combined preparation for simultaneous, separate or sequential use in the treatment of HIV infection.
- (Previously presented) A pharmaceutical composition comprising a
  pharmaceutically acceptable carrier and as active ingredients (a) a compound as defined in claim
  26, and (b) another antiretroviral compound.
  - 42. (Previously Presented) A compound selected from the group consisting of:

and pharmaceutically acceptable addition salts thereof.